REMARKS/ARGUMENTS

The Applicants originally submitted Claims 1-41 in the application. The Examiner has indicated that Claims 39-40 are allowable if rewritten in independent form. In response, the Applicants have amended Claims 1, 9, 11, 13, 21, 23, 25, 33, 35 and 37. No claims have been canceled or added. Accordingly, Claims 1-41 are currently pending in the application.

I. Formal Matters and Objections

The Examiner has objected to Claims 37-40 for informalities. More specifically, the Examiner has objected to Claim 37 for not stating that the piggyback packet is used in a system which sends various types of packets and if the packet type refers to a specific field in the packet. In response, the Applicants have amended Claim 37 to indicate a communications network employing various types of packets and to state that packet type indicates if the piggyback packet is independent of a data packet. Accordingly, the Applicants respectfully request the Examiner to withdraw this objection.

The Examiner has also objected to the use of "piggyback packet" for being a contradiction of piggyback. The Applicants respectfully disagree.

Piggyback packet refers to a packet containing characteristics associated with a physical layer system that is transmitted following a data packet when associated with that data packet. In some embodiments, a data packet is not received but a piggyback packet is generated to provide proactive notification of the characteristic changes. Since a data packet has not been received, the piggyback packet is not transmitted following the data packet. (*See* paragraph 33, pages 16-17.)

Accordingly, the piggyback packet correctly describes the transmission of a packet that reflects a changed characteristic of a physical layer system. The Applicants understand that in some embodiments when the packet is not associated with a data packet, the piggyback packet does not follow a data packet. However, this is not a contradiction of terms but a different method of transmission based upon changing characteristics of the physical layer system. Thus, the Applicants respectfully request the Examiner to withdraw this objection.

II. Rejection of Claims1-36 under 35 U.S.C. §112

The Examiner has rejected Claims 1-36 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention. More specifically, the Examiner asserts that "containing" of Claims 1, 13 and 25 does not limit the piggyback packet from including more characteristics than just those associated with the physical layer system. The Applicants agree with the interpretation of the Examiner but do not understand how this is indefinite. As discussed in the specification, the piggyback packet includes the physical layer system characteristics that reflect a changed characteristic but is not limited to only these characteristics. Independent Claims 1, 13 and 25 particularly point and distinctly claim that a piggyback packet that reflects a changed characteristic of the physical layer system does not preclude that only these characteristics are included. Independent Claims 1, 13 and 25, therefore, are not indefinite and the Applicants respectfully request the Examiner to withdraw the §112, second paragraph, rejection.

III. Rejection of Claims1-36 under 35 U.S.C. §102

The Examiner has rejected Claims 1-36 under 35 U.S.C. §102(b) as being anticipated by a textbook written by James Martin (Martin). The Applicants respectfully disagree.

Martin is directed to local area network (LAN) architectures and a discussion of the components comprising the architectures. In Chapter 2 Martin addresses different media for physical transmission across the LAN. (*See* page 19.) In Chapter 6 Martin discusses the Medium Access Control (MAC) sublayer that controls access to the physical transmission media. (*See* page 100.) Martin does not, however, construct a piggyback packet that reflects a changed characteristic of the physical layer system as recited in independent Claims 1, 13 and 25. On the contrary, Martin simply discusses and list the various standards and how each standard describes the MAC layer and physical layer functions. The Applicants do not find where Martin discloses packets that reflect a changed characteristic of the physical layer or, more specifically, a piggyback packet that reflects such changes. Thus, Martin does not teach each element of independent Claims 1, 13 and 25.

Since Martin does not teach each element of independent Claims 1, 13 and 25, Martin does not anticipate Claims 1, 13 and 25 and Claims dependent thereon. Accordingly, the Applicants respectfully request the Examiner to withdraw the §102 rejection with respect to Claims 1-36 and allow issuance thereof.

IV. Rejection of Claims 37-38 under 35 U.S.C. §102

The Examiner has rejected Claims 37-38 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,704,898 to Furuskar. The Applicants respectfully disagree.

Furuskar is directed to error handling in the field of communications and using forward error correction (FEC) automatic retransmission requests (ARQ) and variable redundancy in digital communication systems. (*See* column 1, lines 13.) Furuskar does not teach, however, a piggyback packet including a packet type that indicates if the piggyback packet is independent of a data packet as recited in Claim 37. In fact, Furuskar does not even address piggyback packets. On the contrary, Furuskar is directed to segmenting Logical Link Control (LLC) frames into blocks of different sizes depending on the Modulation and Coding Schemes (MCS) to be used. A frame check sequence (FCS) and a header are added to each of the segmented blocks. (*See* column 6, lines 18-44.) Thus, Furuskar does not disclose a piggyback packet but a frame that has been divided into blocks.

Since Furuskar does not teach each element of independent Claim 37, Furuskar does not anticipate Claim 37 and Claims dependent thereon. Accordingly, the Applicants respectfully request the Examiner to withdraw the §102 rejection with respect to Claims 37-38 and allow issuance thereof.

V. Conclusion

In view of the foregoing amendment and remarks, the Applicants now see all of the Claims currently pending in this application to be in condition for allowance and therefore earnestly solicit a Notice of Allowance for Claims 1-41.

The Applicants request the Examiner to telephone the undersigned attorney of record at (972) 480-8800 if such would further or expedite the prosecution of the present application.

Respectfully submitted,

HITT GAINES, P.C.

J. Joel Justiss
Registration No. 48,981

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P.O. Box 832570
Richardson, Texas 75083
(972) 480-8800